

Work Order ID 70891

Thursday, June 16, 2011 3:37:06 PM



Page 1

Item ID: D3183-5	Accept		Setup	Start	
Revision ID:				Stop	
Item Name: Bearing					
Start Date: 6/16/2011	Start Qty: 30.00		Cust Item ID:		
Required Date: 6/23/2011	Req'd Qty: 30.00		Customer:		

Reference:

Approvals:	Process Plan:	Date: 11-06-16	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3183	Rev C1

100		0.00							
	PURCHASING								
Purchasing	Memo	0.00							
Purchasing	Issue P/O: 14303 <input type="checkbox"/> Bearing as per Dwg D3183 <input type="checkbox"/> Single row, deep groove, Conrad type, shielded <input type="checkbox"/> Possible Supplier: NSK P/N 6800ZZ <input type="checkbox"/> Certificate of conformity note is required								

11-06-16 (30)

110	Receive & Inspect for Damage & Mat'l Certs	0.00							
Packaging	Memo	0.00							
Packaging	Ensure certificate of conformity is attached								

6/16/20 (30)

120	QC6- Inspect dimensions to drawing	0.00							
QC	Memo	0.00							
Quality Control									

6/16/20

(30)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 70891

Thursday, June 16, 2011 3:37:06 PM



Page 2

Item ID: D3183-5

Accept



Setup Start



Revision ID:

Stop



Item Name: Bearing

Start Date: 6/16/2011 Start Qty: 30.00



Cust Item ID:

Required Date: 6/23/2011 Req'd Qty: 30.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 Packaging Packaging	Identify as per dwg & Stock Location 23p Memo	0.00 0.00							
140 QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							

11/6/2011 30

11/6/2011

MF
11-06-30

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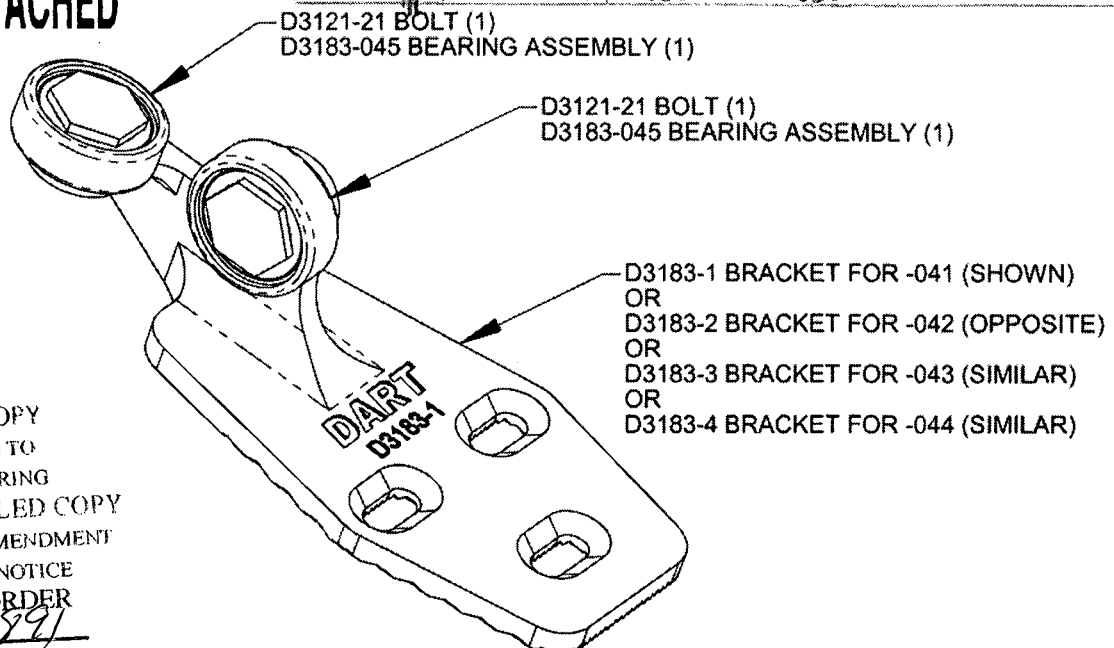


DESIGN #	DRAWN BY UP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3183	REV. C SHEET 1 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1
A	03.01.24	NEW ISSUE	
B	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
CI	04.11.09	0.830 WAS 0.850	

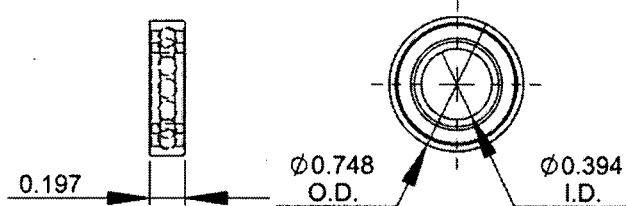
RELEASED
04.03.01
DEO ATTACHED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 70891

PL 11-06-16

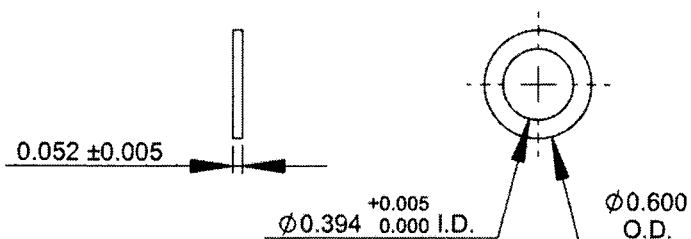


D3183-041 BRACKET ASSEMBLY (SHOWN)
D3183-042 BRACKET ASSEMBLY (OPPOSITE)
D3183-043 BRACKET ASSEMBLY (SIMILAR)
D3183-044 BRACKET ASSEMBLY (SIMILAR)



D3183-5 BEARING:
SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES



D3183-7 WASHER

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

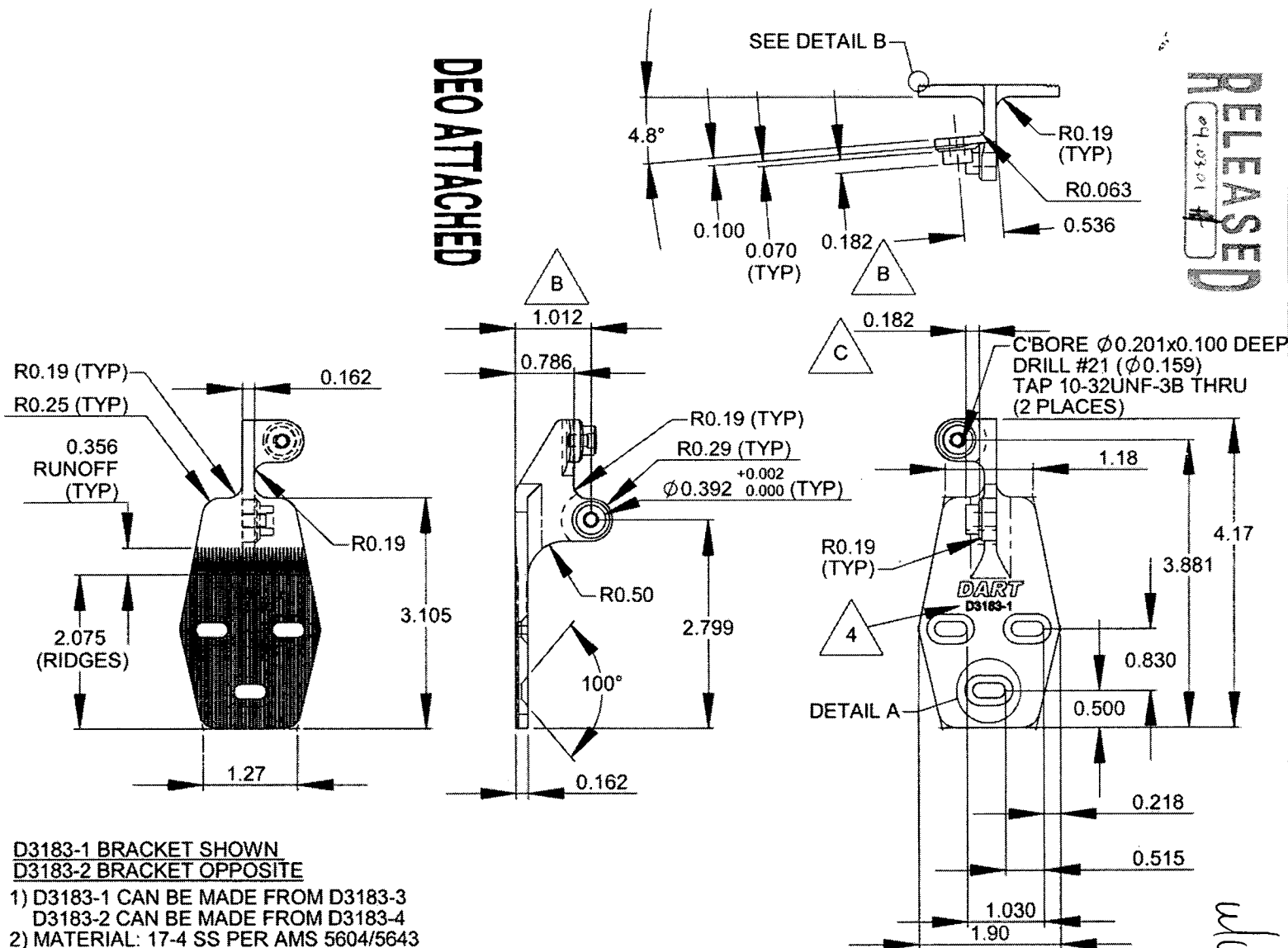
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD	REV. C
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA	SHEET 2 OF 4
DATE	TITLE	DRAWING NO.	SCALE
04.02.17	BRACKET ASSEMBLY	D3183	1:2

RELEASED
04-03-01**DEO ATTACHED**

D3183-1 BRACKET SHOWN
D3183-2 BRACKET OPPOSITE

- 1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

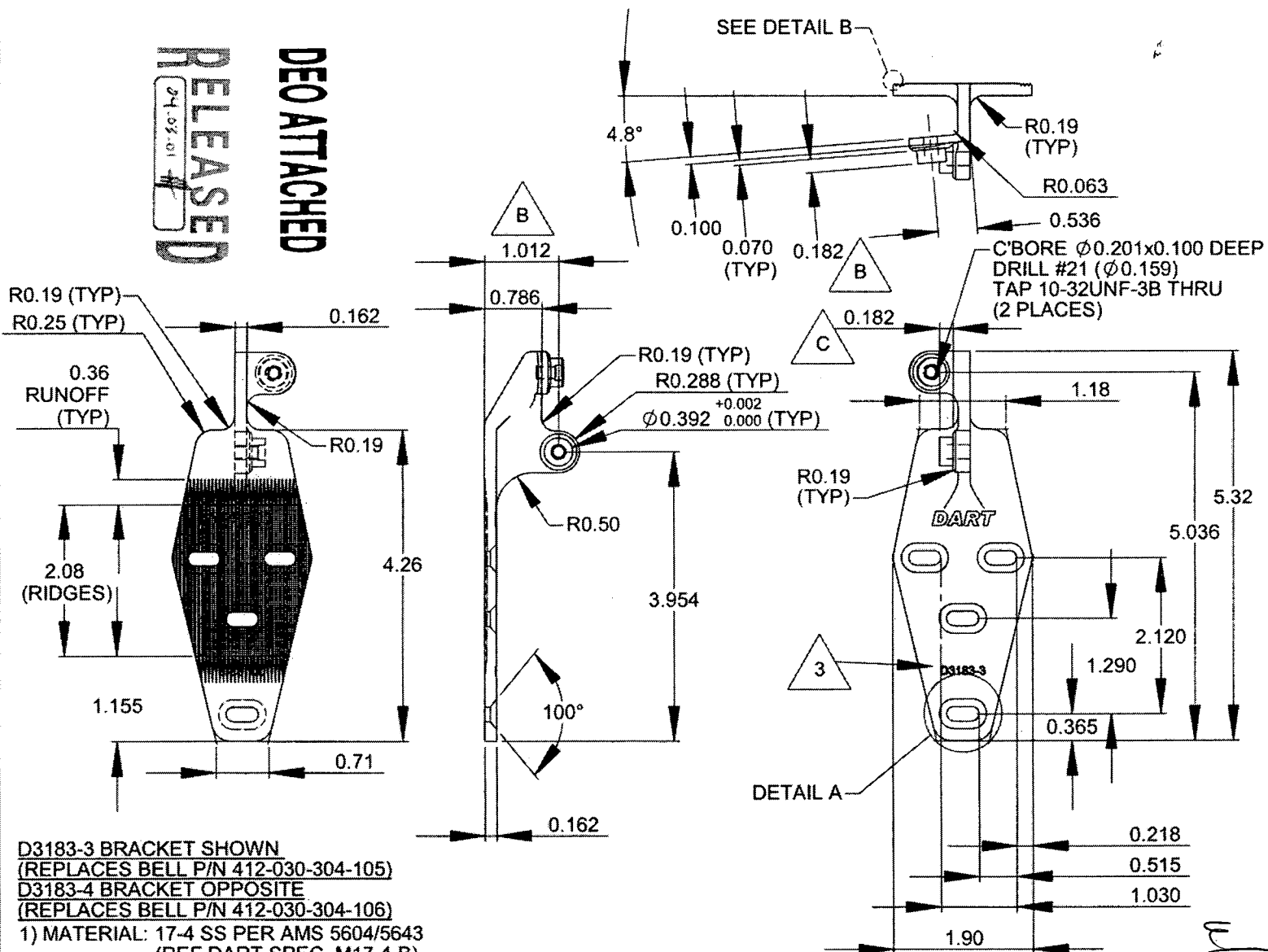
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NOTE: Date & initial all entries

QA COPY ISSUED

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. C
		D3183	SHEET 3 OF 4
DATE		TITLE	SCALE
04.02.17		BRACKET ASSEMBLY	1:2



D3183-3 BRACKET SHOWN
(REPLACES BELL P/N 412-030-304-105)

D3183-4 BRACKET OPPOSITE
(REPLACES BELL P/N 412-030-304-106)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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DEO ATTACHED

RELEASED
24-03-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

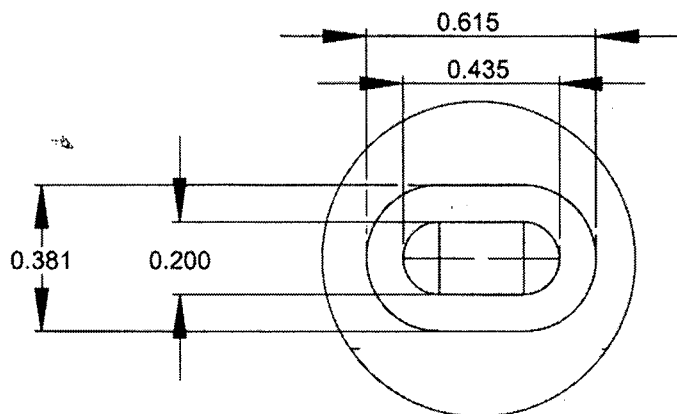
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3183	REV. C SHEET 4 OF 4
DATE 04.02.17	TITLE BRACKET ASSEMBLY		SCALE 1:1

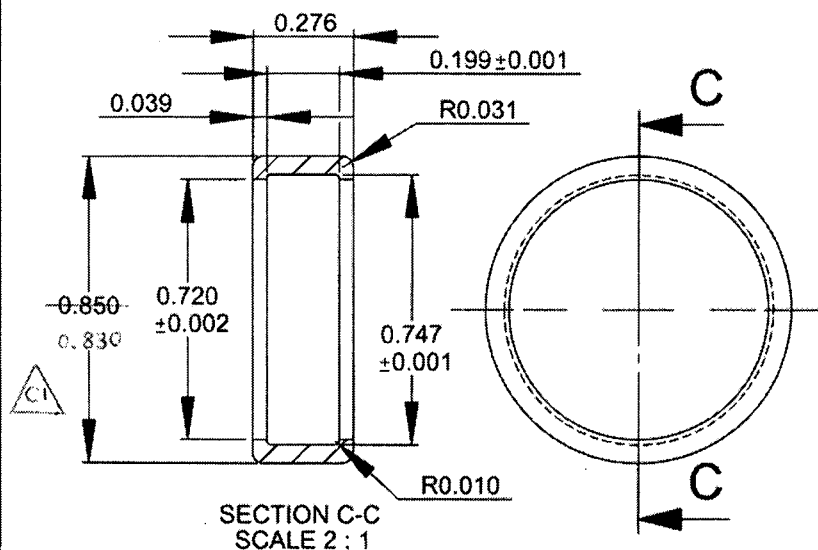
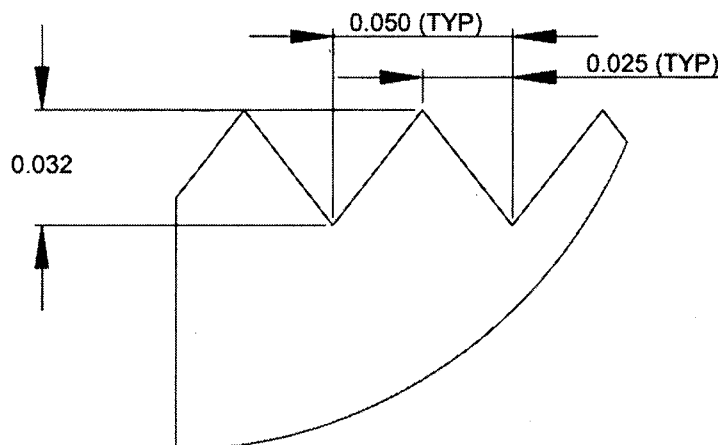


DETAIL A (2 : 1)

RELEASED
04.03.01

DEO ATTACHED

DETAIL B (20 : 1)



D3183-9 CAP

- 1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

- 1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DRAWING NO. D3183	TITLE BRACKET ASSEMBLY	REV.C1	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3183-C1-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN 92	CHECKED 1	MFG. APPR. A	APPROVED MP		DE APPR. H		
DATE 10.05.14	DATE 10.06.30	DATE 10.06.30	DATE 10/06/30		DATE 10/06/30		

D3183-5 BEARING

ADD POSSIBLE SUPPLIER: KML P/N 6800-ZZ

BASIC LOAD RATING REQUIREMENT: Cr = 1720 N (386 lb) MIN [DYNAMIC]
Cor = 840 N (188 lb) MIN [STATIC]

REF PAR 10-012

70891

RELEASED
2010-07-22
MP

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO14303**

Purchase Order Date 6/16/2011

PO Print Date 6/16/2011

Page Number 1 of 1

Order From :

VC-MA1001

MAIN INDUSTRIAL SALES LTD.
1475, TESSIER
HAWKESBURY, ON K6A 3S6
CA

Contact Name

Vendor Phone

613 632 3595

Vendor Fax

613 632 0262

Vendor Account Nbr

Buyer

Brigitte Golden

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	6800ZZ	Bearing	6/17/2011 Yes	30.00 Each	Yours ppd	\$1.4800	\$44.40

Special Inst: DRAW #: 3183
Rev: C1
B70891
Single Row, deep groove, Conrad type,
shielded

PO Total:

\$44.40

Change Nbr: 1

Change Date: 6/16/2011

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable

MAIN INDUSTRIAL SALES LTD.

1475 TESSIER ST.

HAWKESBURY ON K6A 3S6

Phone: (613) 632-3595 Ext. Fax: (613) 632-0262

sales@mainindustrialsales.com

Packing Slip

DATE June 17, 2011

NUMBER 0000145535

CUSTOMER NO. DART

BILL TO:

DART AEROSPACE LTD.

1270 ABERDEEN ST.

HAWKESBURY ON K6A 1K7

SHIP TO:

DART AEROSPACE LTD.

1270 ABERDEEN ST.

HAWKESBURY ON K6A 1K7

(613) 632-5200 Ext.

(613) 632-5200 Ext.

P.O. NUMBER	SALESPERSON	ORDER DATE	REQ. DATE	ORDER NUMBER
14303	EB	17-Jun-11		0000145535
F.O.B.	SHIP VIA	TERMS		
F.O.B. value	PICK UP	NET 30 DAYS		
PART NUMBER	UOM	QUANTITY		
DESCRIPTION		REQ.	SHIPPED	B.O.
0-68002ZKML BALL BEARING YOUR PART #: 6800ZZ	EA	30	30	

8 4/06/20